

To: Zell, Christopher[zell.christopher@epa.gov]; Mann, Laurie[mann.laurie@epa.gov]
From: Kolosseus, Andrew (ECY)
Sent: Mon 8/1/2016 3:26:51 PM
Subject: RE: TMDLs

Good morning:

One of many significant advantages of using concentration (and the translator) is it works for all conditions, including but not limited to the critical condition. It works in high flow (run-off induced problems) and low flow (steady pollution problems such as septic). A cfu/day, on the other hand, is only helpful for a singular given flow. The TMDL considers a wet and dry season (page 65).

The LC is 50, 100, or 200 cfu/100mL (page 43), depending on which part of the standard and which part of the river. One can use the translator to determine the cfu/day at any flow.

The LA is prescribed for multiple periods (page 65), as a concentration (same as above), with percent reductions to help prioritize. One can use the translator to determine the cfu/day at any flow.

WLAs are also 50, 100, or 200 cfu/100mL (pages 52-57). Ditto on the use of the translator.

See pages 83-84 for bacteria MOS. If every source and every inflow meets standards, we're set.

Andrew

Andrew Kolosseus
Washington State Dept. of Ecology
PO Box 47775
Olympia, WA 98504-7775
(360) 407-7543

From: Zell, Christopher [mailto:zell.christopher@epa.gov]
Sent: Friday, July 29, 2016 8:06 AM
To: Kolosseus, Andrew (ECY) <AKOL461@ECY.WA.GOV>; Mann, Laurie <mann.laurie@epa.gov>
Subject: RE: TMDLs

As we assess the translator you are proposing, I was hoping you could answer a couple of questions:

- How does the approach consider critical conditions?
- What is the LC, LA, WLA, and MOS for the assessment unit?

Thank you,

Chris

From: Kolosseus, Andrew (ECY) [mailto:AKOL461@ECY.WA.GOV]
Sent: Tuesday, July 26, 2016 6:07 PM
To: Mann, Laurie <mann.laurie@epa.gov>; Zell, Christopher <zell.christopher@epa.gov>
Subject: TMDLs

Laurie and Chris:

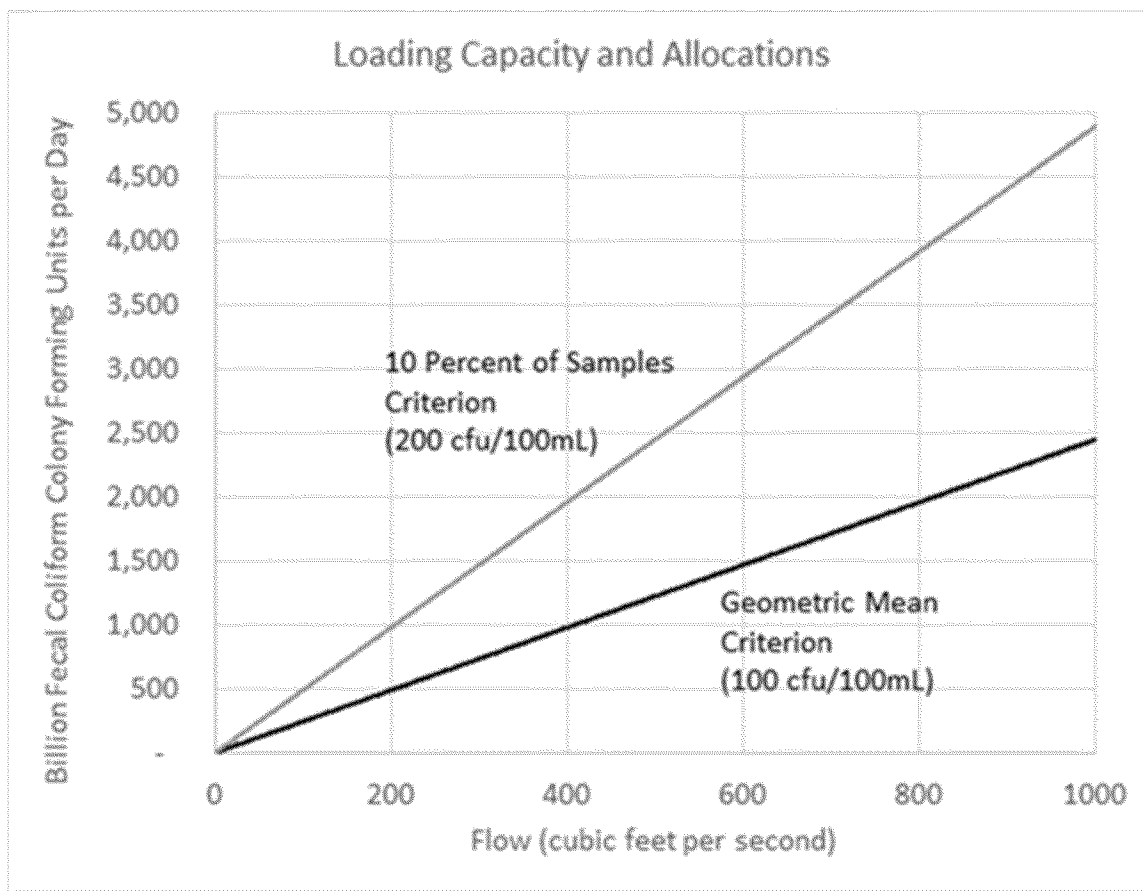
Thanks for the productive meeting today. While I do hope to have these conversation much earlier in the process next time, I am glad we were able to productively address many issues.

Attached are two documents – take a look at our 2014 plan to phase the TMDLs (I looked and Jo H. was the EPA person at this point) and our approach from last week’s advisory group meeting on what phase 2 was actually going to cover (this had always been unclear).

I’m thinking something like this:

Ecology submitted a TMDL for the Deschutes River (above the Deschutes Falls), Percival Creek, and tributaries to Budd Inlet for temperature, fecal coliform, fine sediments, dissolved oxygen, and pH. These creeks and rivers flow into Capitol Lake and Budd Inlet. They cause some of the impairments for phosphorus, dissolved oxygen, and/or bacteria in Capitol Lake and Budd Inlet. Ecology is currently preparing a TMDL for dissolved oxygen in Budd Inlet. If the Deschutes TMDL, the future Budd Inlet TMDL, or other actions do not completely correct the remaining problems in Capitol Lake and Budd Inlet, Ecology will prepare another TMDL. If these TMDLs are not approved by EPA by {DATE}, EPA will prepare TMDLs for these waterbodies.

Generally speaking, perhaps it would be helpful in TMDLs to include a ‘universal translator’ when discussion CFUs/day versus concentration. Anyone can take the concentration provided in the TMDL along with their instantaneous flow at the creek/river/outlet to calculate the maximum daily load in CFUs per day. Something like: “The TMDL calculates loading capacity and allocations in concentration units. To convert to the number of colony forming units (CFUs) per day, simply use the flow and Figure 1. For example, the 7Q10 in XXXX River is XX CFU at XX location, so the load capacity is XXX CFUs per day.”



Thoughts?

Andrew

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Olympia, WA 98504-7775
(360) 407-7543

